

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,088	10/21/2005	Roger Siljeholm	43315-223685	2889
²⁶⁶⁹⁴ VENABLE LL	7590 08/09/2007 D		EXAMINER	
P.O. BOX 343	85		THOMAS, LUCY M	
WASHINGTO	N, DC 20043-9998	•	ART UNIT	PAPER NUMBER
			2836	
			MAIL DATE	DELIVERY MODE
			08/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)				
Office Action Summary		10/554,088	SILJEHOLM ET AL.				
		Examiner	Art Unit				
		Lucy Thomas	2836				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
WHIC - Exter after - If NO - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DA nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period we re to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing end patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status	·	·					
·	Responsive to communication(s) filed on <u>21 October 2005</u> .						
,	This action is FINAL . 2b)⊠ This action is non-final.						
3)[_]	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Dispositi	on of Claims		•				
5)□ 6)⊠	 4) Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-8 is/are rejected. 7) Claim(s) is/are objected to. 						
8) Claim(s) are subject to restriction and/or election requirement.							
	on Papers						
•	The specification is objected to by the Examiner The drawing(s) filed on is/are: a)		Evaminar				
10)		· · · · · · · · · · · · · · · · · · ·					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	inder 35 U.S.C. § 119						
a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau See the attached detailed Office action for a list of	have been received. have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage				
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	te				
	nation Disclosure Statement(s) (PTO/SB/08) r No(s)/Mail Date <u>10/21/2005</u> .	6) Other:					

Application/Control Number: 10/554,088

Art Unit: 2836

DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holmstrom et al. (US 5,608,957). Regarding Claim 1, Holmstrom discloses a surge arrester (Figures 1-3) comprising a stack of a plurality of cylindrical varistor blocks 10. preferably made of metal oxide (Zinc oxide), which are arranged one after the other in the axial direction of the varistor blocks, an upper end electrode 11 and a lower end electrode 12, clamping members 14-17 of insulating material comprising at least three loops (four loops, 14, 15, 16, 17) of continuously wound fiber, which connect the upper end electrode to the lower end electrode, a bursting-protective bandage 21 in the form of a plurality of rings or bands wound of fiber, and a surrounding, electrically insulating, outer casing 23 of rubber or other polymeric material, characterized in that the loops are wound of glass fiber (see Abstract, Claim 1, Column 2, lines 44-57). Holmstrom does not disclose the loops exhibiting asymmetrical cross section (Holmstrom discloses loops having square cross section having symmetry). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the shape of the loops of Holmstrom, to have any (asymmetrical or symmetrical) cross section to provide the required or necessary contact pressure (see Holmstrom Abstract, lines 4-8),



Application/Control Number: 10/554,088 Page 3

Art Unit: 2836

because shape, size, and number of loops are based on contact pressure required for the particular surge arrester system.

Claims 2-5 basically recite the increased contact area of the recited asymmetrical loop and that the increased contact area shorten the free span of the rings to be wound closer to the stack (the more area contacted or covered by loops leaves less area for the rings to cover), and enable the ring or bands to be wound closer to the stack (thickness of the loops determines how close the bands are wound to the stack), and Holmstrom's loops function to provide the necessary contact pressure, and recited limitations are necessarily met.

Regarding Claim 6, Holmstrom discloses that the cross sections of the loops are adapted such that the shapes of the rings or bands become approximately circular (a substantially square shape is approximately circular, see Claim 6).

Regarding Claim 7, Holmstrom discloses that the cross sections of the loops essentially correspond to two mirror-inverted square (the recited rhomb or rhomboid is an diagonally stretched rectangle).

Regarding Claim 8, Holmstrom discloses the surge arrester, characterized in that the rings or bands are wound of aramide fiber or glass fiber with an epoxy or vinyl ester matrix (see Claims 9-11).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Breggren et al. (US 5,912,611) discloses a surge arrester

Application/Control Number: 10/554,088 Page 4

Art Unit: 2836

comprising at clamping members of insulating material comprising at least three loops, wherein the loops having rectangular cross section.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucy Thomas whose telephone number is 571-272-6002. The examiner can normally be reached on Monday - Friday 8:00 AM - 4:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Sherry can be reached on 571-272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LT August 04, 2007

MICHAEL SHERRY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800